



Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651  
Page 96 of 102

FIG. 1 – FLUPSY (Floating Upweller System )

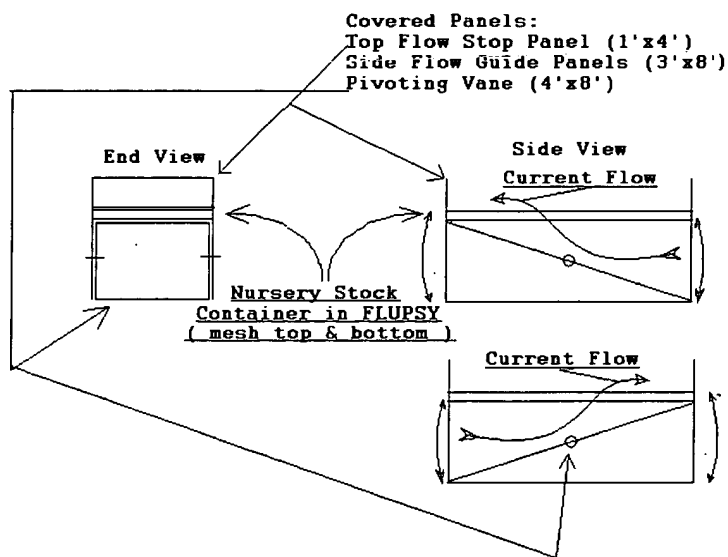




FIG. 2 – BUPSY ( Bottom Upweller System )

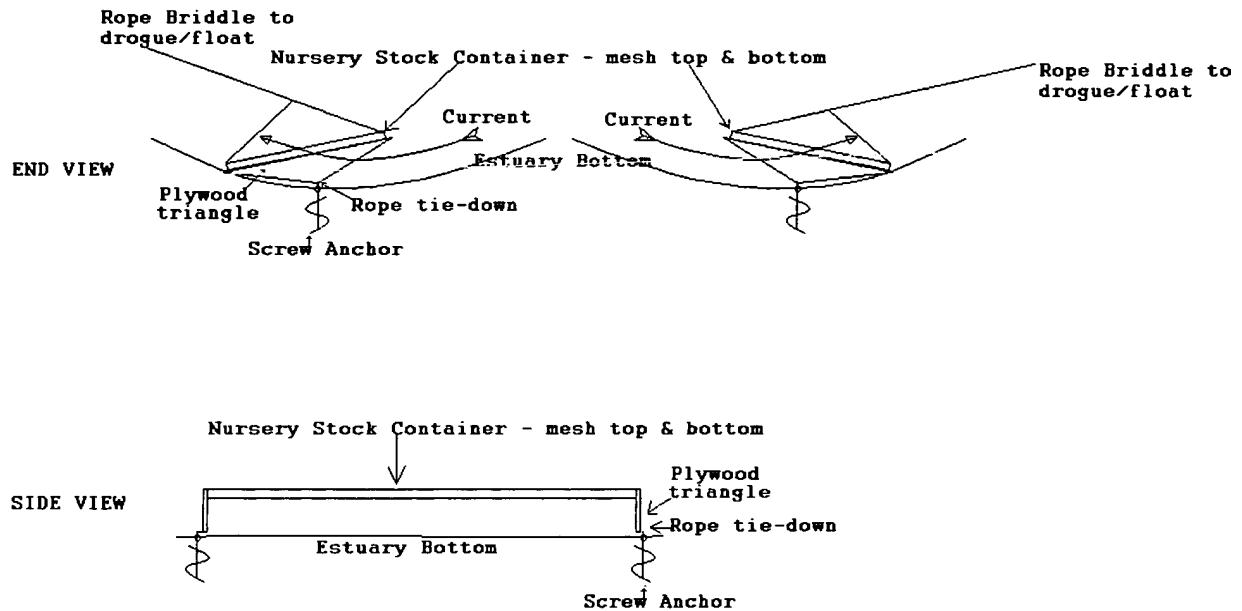


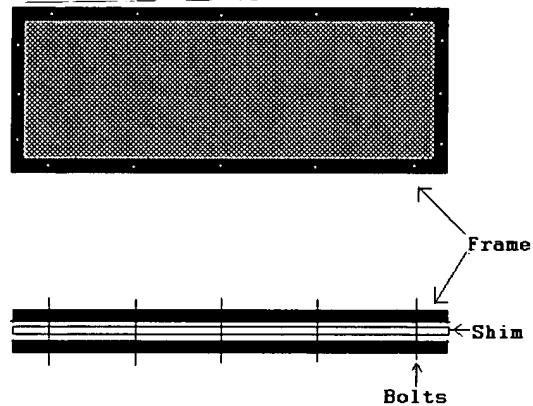


FIG. 3 - Nursery Stock Container  
Provisional Patent Application

TOP VIEW - Two ridged frames, each covered with mesh ( sized to retain shellfish ), bolted together.

The frames are seperated with a combination of ridged and compressible (closed cell foam ) shims so that the shellfish are gently but securely held by the assembly.

SIDE VIEW





Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651  
Page 99 of 102

FIG. 4 - End View of  
Spawntoon

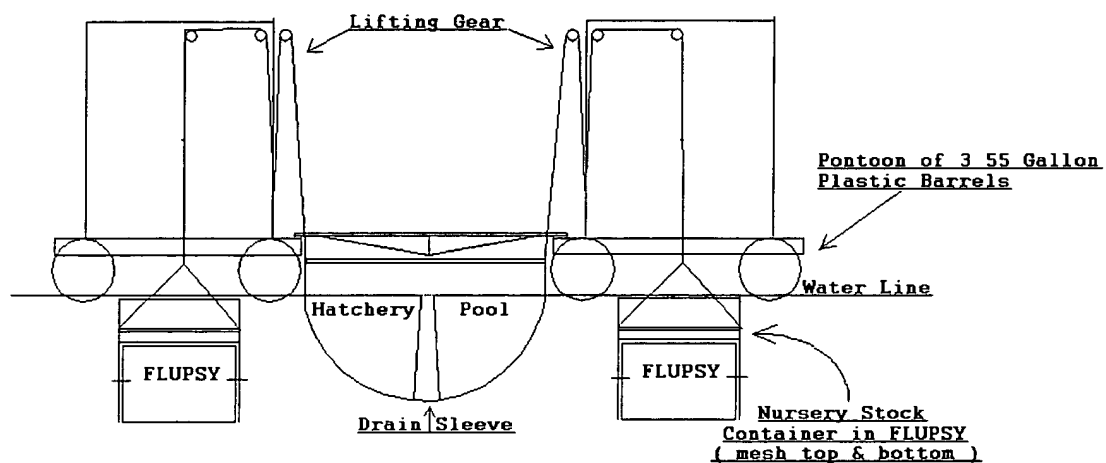
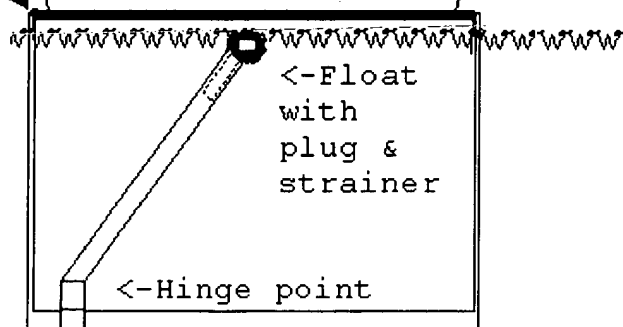




FIG. 5 – Drain Device for floating hatchery live-well

**Hatchery Live-Well**

Filled with filtered water for spawn. The drain device is plugged. The ridged frame of the Hatchery Pool is either held above the water by ropes or supported by the floatation of the live-well itself.

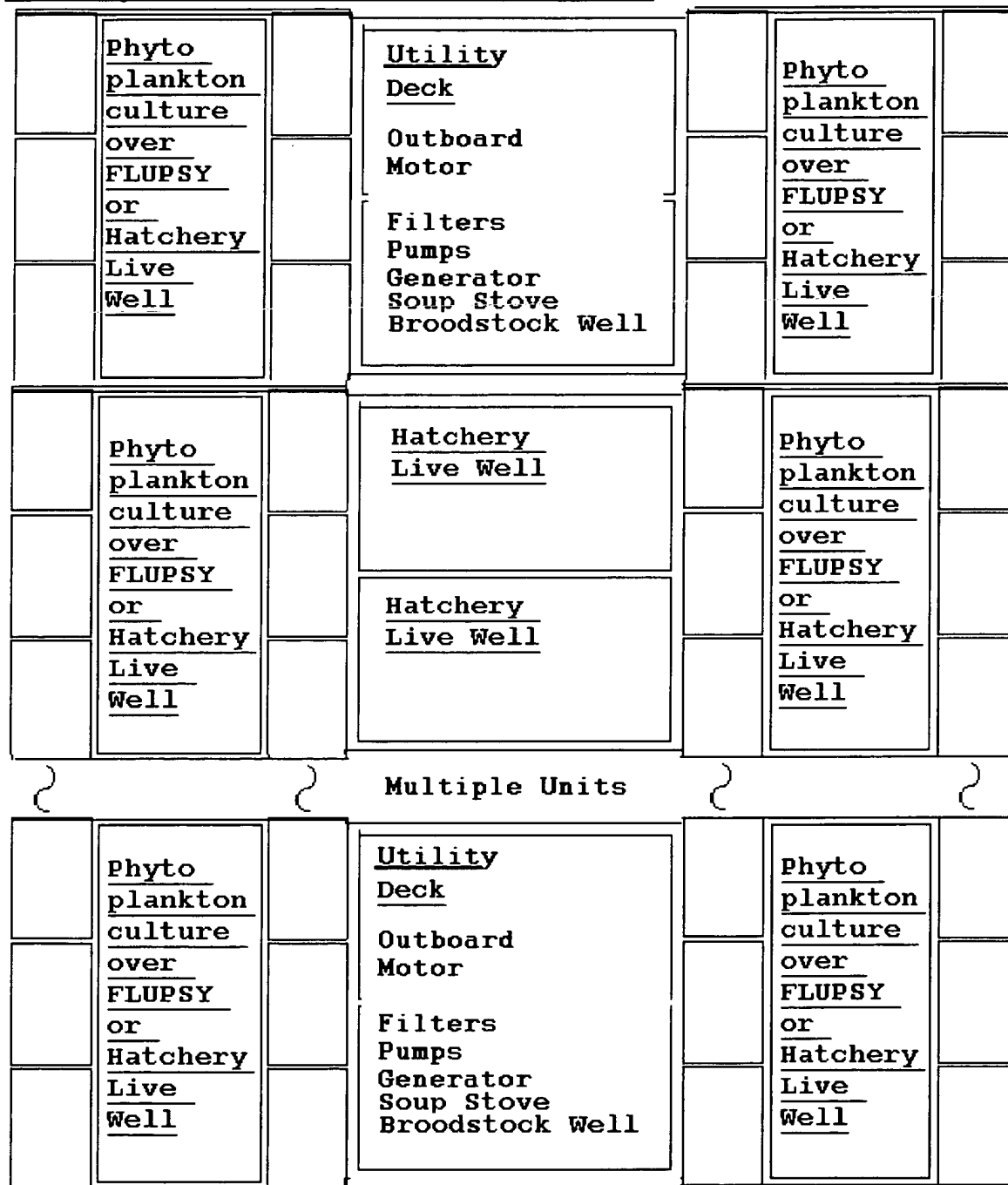




Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651

Page 101 of 102

FIG. 6 – SpawnToon Motorboat "The Mama Cass Ostrea"

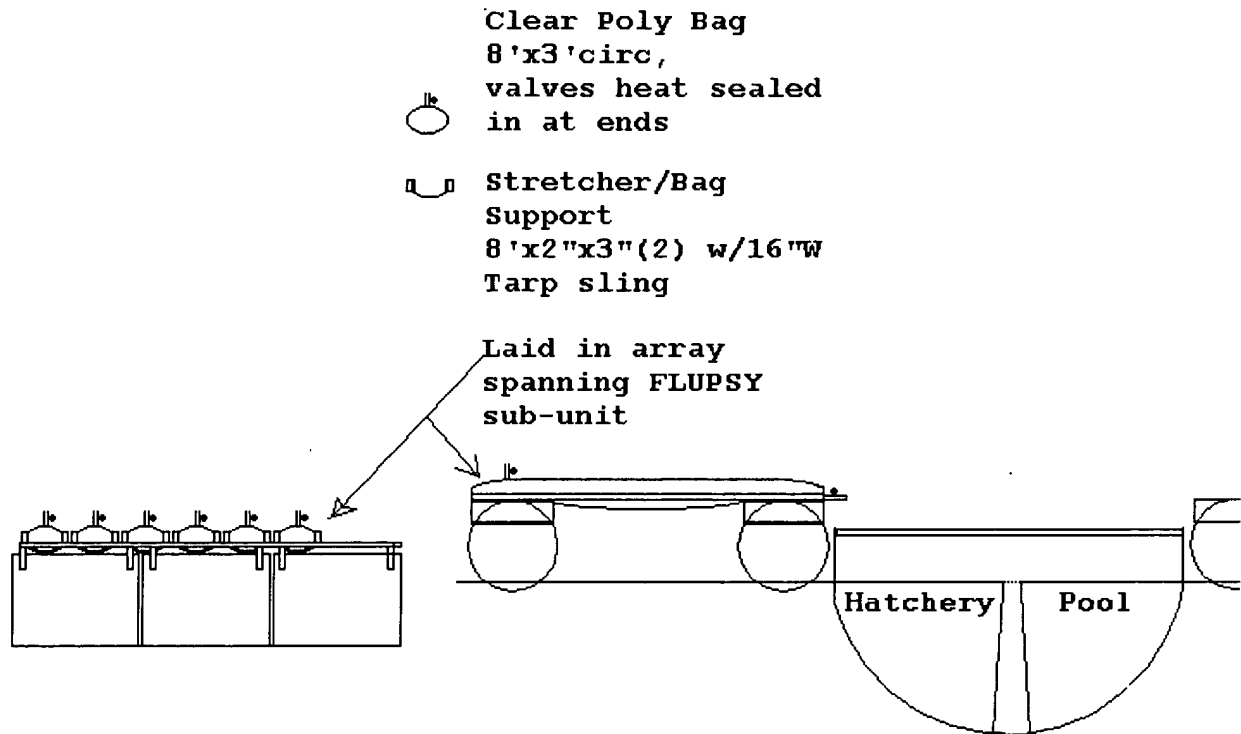




Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651

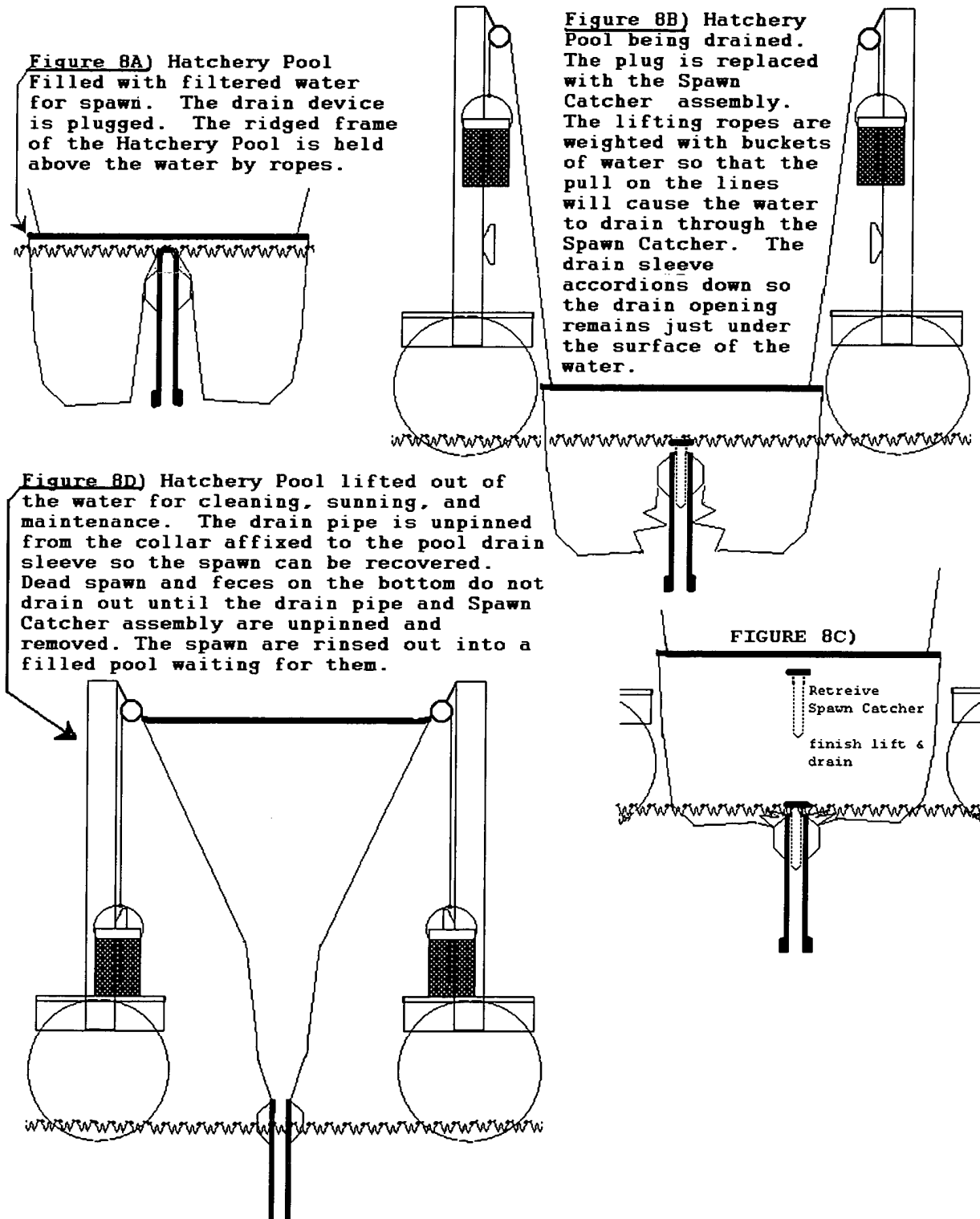
Page 102 of 102

FIG. 7 – Phytoplankton Culture: Culture Bag w/fittings, Stretcher resting on two pontoons





**FIG. 8 – Hatchery Live Well Drain-Sleeve and Spawn Catcher**







Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651

Page 104 of 102

FIG. 9 - Outboard Motor Mount ( with DAVIS NOZZLE ) slung underneath SpawnToon deck,  
Profile of the Tubular Shroud surrounding the propeller and bolted to the cavitation plate

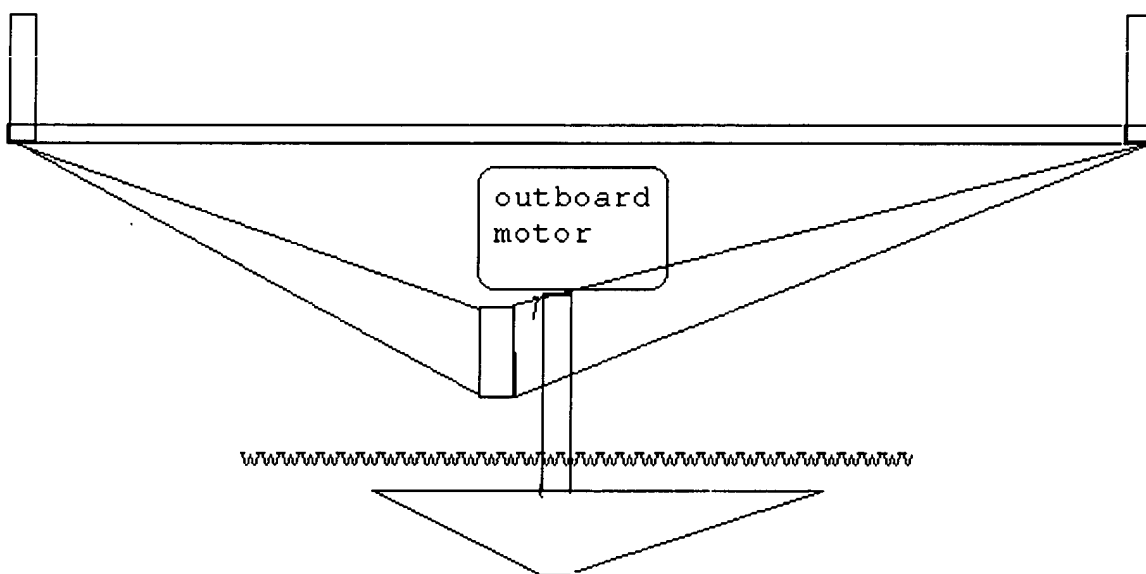
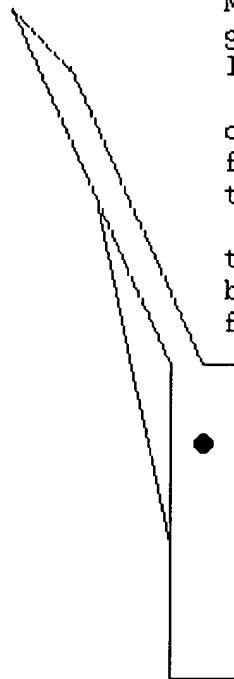




FIG. 10 - Davis Harpoon anchor

**Figure 10) DAVIS HARPOON ANCHOR**



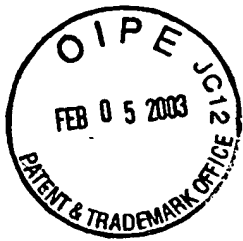
Made from 2 inch dia.  
galvanized pipe 36 inches  
long

one half the pipe is cut  
from one half the length  
to form a trough

the trough portion is  
bent outward and cut to  
form a point on the end

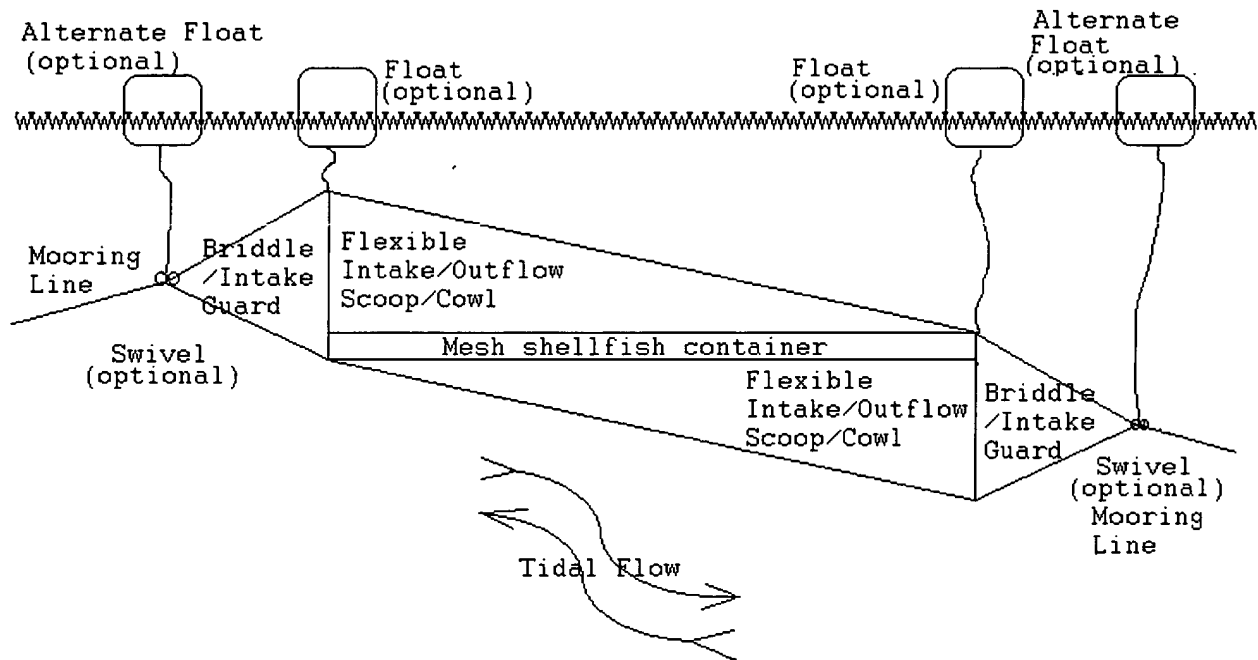
a bolt for  
attaching the  
anchor line is  
placed in tube

anchor is washed  
into place much  
like a piling or  
bulkheading



**Figure 11 A) TWWELLER : side view**

Two Way Upweller/Downweller Shellfish Growing Device



**FIGURE 11 B) TWWELLER: end view**

Rotating Option  
on swiveled mooring

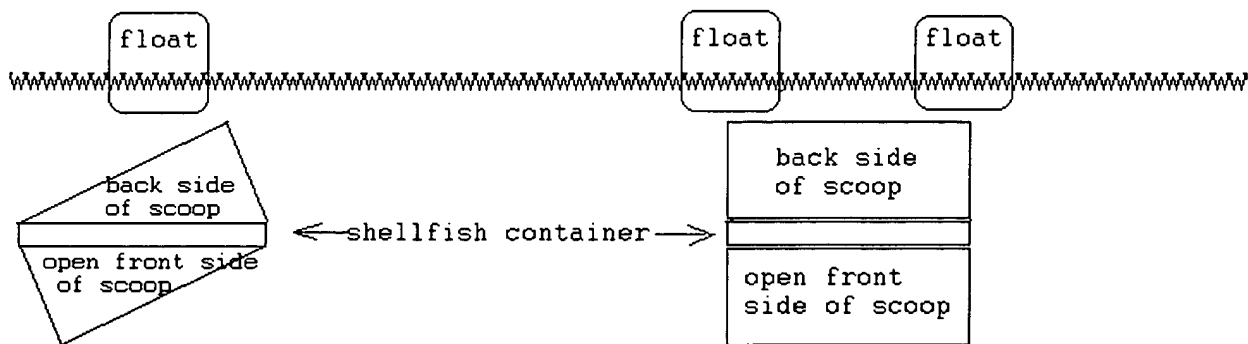


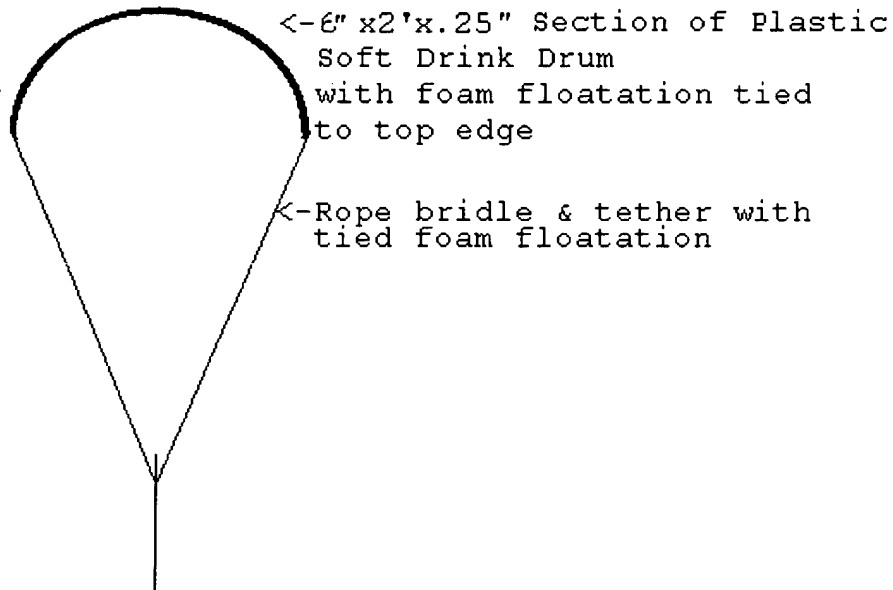
FIG. 11 - TWWELLER



Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651  
Page 107 of 102

FIG. 12 – Float-Drogue

Figure 12) Float-Drogue

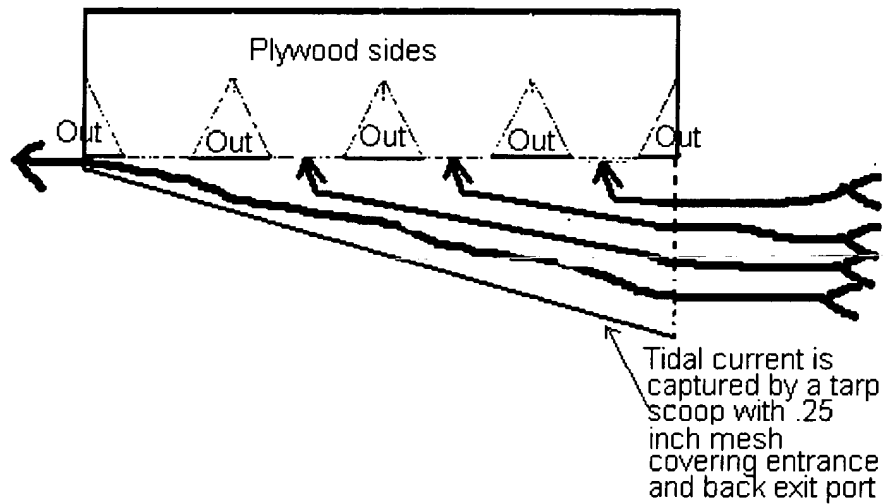




Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651

Page 108 of 102

FIG. 13 Grounding Tolerant FLUPSY scoop of CLAIM 9 servicing a crenellated Marsupium.  
Side View



Water out through triangular ports in the side  
after passing through a 38 micron mesh crenallation panel  
Plywood panel separates inbound water from outbound  
water in the crenallation



Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651  
Page 109 of 102

FIG. 14 – Resuspension Drag Foil of CLAIM 17

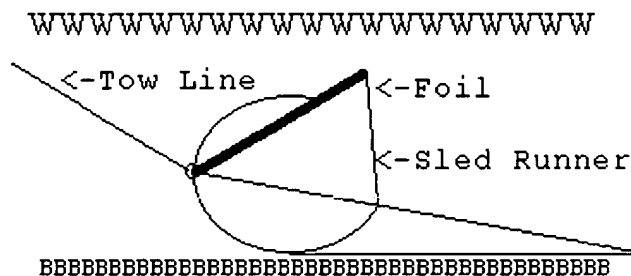
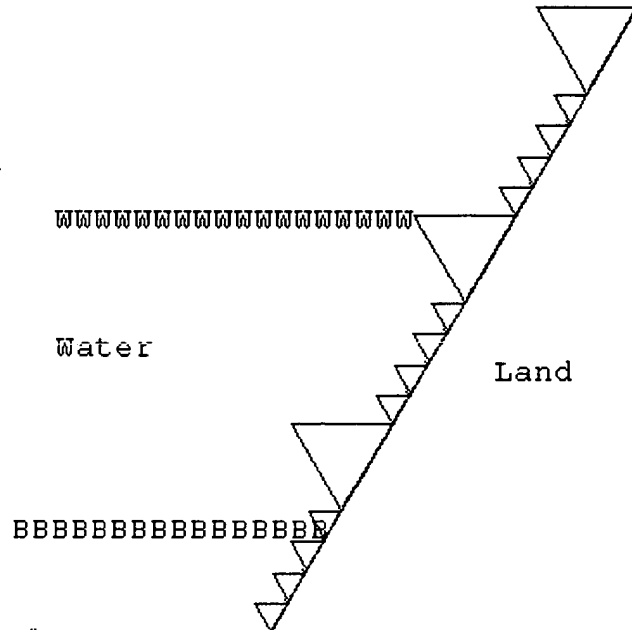




FIG. 15 – Waffle Bulkhead



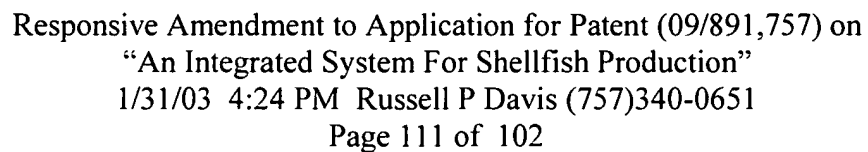
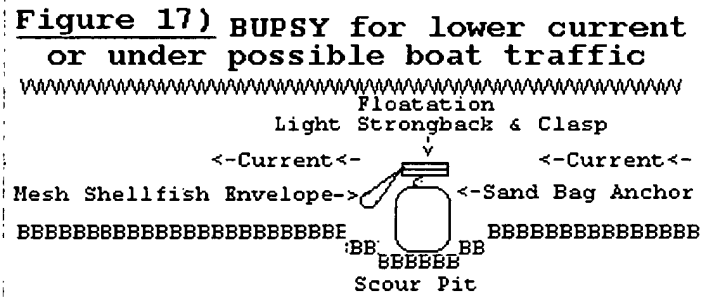
[illegible]



FIG. 17 – BUPSY of CLAIM 8 ( for low current or under possible boat traffic )

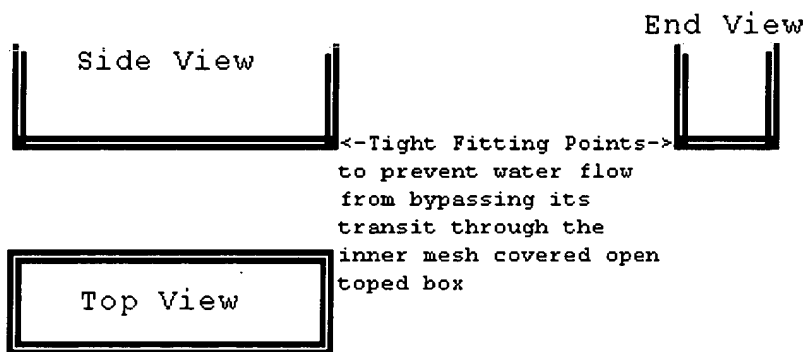




Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651

Page 113 of 102

FIG. 18 – Shellfish Hatchery-Nursery Container of CLAIM 16: Set of two nested open top  
Self Cleaning screen set of CLAIM 7 used by the Marsupium

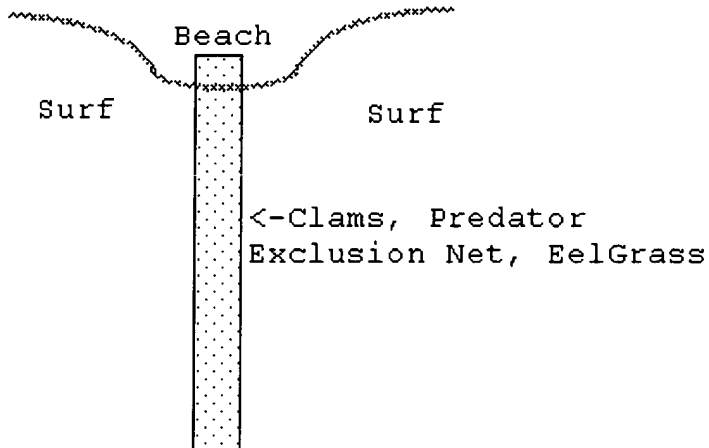




Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651

Page 114 of 102

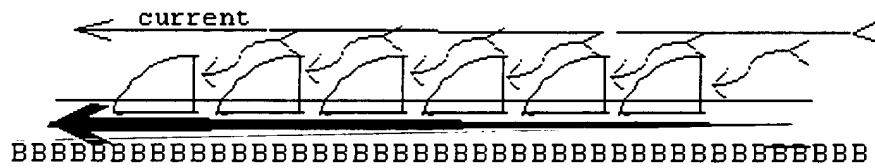
FIG. 19 – Shellfish:SAV Polyculture Groin and Breakwater Substitute of CLAIM 18





Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651  
Page 115 of 102

FIG. 20 Foil Array of CLAIM 10 used for current powered directional sediment Transport





Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651  
Page 116 of 102

**DECLARATION**

<b>DECLARATION &amp; Small Entity Election:</b>	I, Russell Patton Davis, am the sole inventor of this "INTEGRATED SYSTEM FOR SHELLFISH PRODUCTION: Encompassing Hatchery, Nursery, Grow-out, Brood-stock Conditioning and Market Conditioning Phases; also Water Treatment, Food Supplement, Propulsion, Anchoring Security, and Devices for the Integration of Neighborhood Values and Shellfish Production.". The contents herein are true to the best of my knowledge and belief. The applicant is a small entity under the rules of the PTO.  Signed:  Dated:
<b>Inventor Residence and Correspondence Address:</b>	613 Mango Dr., Virginia Beach, VA 23452 USA <a href="http://www.Shellfish-Unlimited.com">http://www.Shellfish-Unlimited.com</a> <a href="mailto:Russell_P_Davis@Shellfish-Unlimited.com">Russell P Davis@Shellfish-Unlimited.com</a>
	757-340-0651



Responsive Amendment to Application for Patent (09/891,757) on  
"An Integrated System For Shellfish Production"  
1/31/03 4:24 PM Russell P Davis (757)340-0651  
Page 117 of 102

**The following order of arrangement should be observed in framing the application:**

(a) Application transmittal form. PTO/SB/05	
(b) Fee transmittal form. PTO/SB/17 & PTO/SB/12	
<b><u>APPLICATION FOR PATENT COVER SHEET</u></b>	
(c) <u>Title of the Invention.</u>	
(d) <b><u>CROSS-REFERENCE TO RELATED APPLICATIONS</u></b> (if any).	
(e) <u>Statement of federally sponsored research/development</u> (if any).	
(f) <u>Reference to a microfiche appendix</u> (if any).	
(g) <b><u>BACKGROUND OF THE INVENTION – AKA: Field of the Invention</u></b>	
(h) <b><u>BRIEF SUMMARY OF THE INVENTION</u></b>	
<b><u>DESCRIPTION OF THE PRIOR ART</u></b>	
<b><u>U.S. Patent Documents</u></b>	
(i) <b><u>BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE INVENTION</u></b>	
(j) <b><u>DETAILED DESCRIPTION OF THE INVENTION.</u></b>	
(k) <b><u>CLAIMS.</u></b>	
(l) <b><u>ABSTRACT</u></b> of the disclosure.	
(m) <b><u>DRAWINGS</u></b> (if any).	
(n) Executed oath or <b><u>DECLARATION.</u></b>	